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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,153	03/29/2006	Wolfgang von Deyn	BASF.10129WOUS	2172
45473	7590	01/31/2008		
HUTCHISON LAW GROUP PLLC			EXAMINER	
PO BOX 31686			LOEWE, SUN JAE Y	
RALEIGH, NC 27612			ART UNIT	PAPER NUMBER
			1626	
			MAIL DATE	DELIVERY MODE
			01/31/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/574,153	DEYN ET AL.	
	Examiner	Art Unit	
	Sun Jae Y. Loewe	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-37 is/are pending in the application.
- 4a) Of the above claim(s) 20-22, 28-30 and 33-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19, 23-27, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

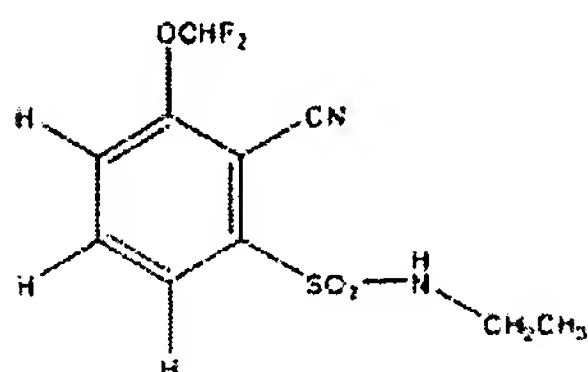
- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3-29-2006</u> .                                               | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Claims 19-37 are pending in the instant application. Claims 1-18 were cancelled by preliminary amendment filed on March 29, 2006.

### *Election/Restrictions*

2. Applicant's election without traverse of Group I, and compound 66 (structure below), in the reply filed on December 14, 2007 is acknowledged.



3. The following guidelines are provided by MPEP 1893.03(d):

“ Note: the determination regarding unity of invention is made without regard to whether a group of inventions is claimed in separate claims or as alternatives within a single claim. The basic criteria for unity of invention are the same, regardless of the manner in which applicant chooses to draft a claim or claims.

>If an examiner (1) determines that the claims lack unity of invention and (2) requires election of a single invention, when all of the claims drawn to the elected invention are allowable (i.e., meet the requirements of 35 U.S.C. 101, 102, 103 and 112), the nonelected invention(s) should be considered for rejoinder. Any nonelected product claim that requires all the limitations of an allowable product claim, and any non-

#### ¶ 18.20 National Stage Election of Species in 35 U.S.C. 371 Applications

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If ”

The elected species, and the generic claims encompassing the elected species, was not allowable (Sections 7-12). Pursuant MPEP 1893.03(d), non-elected species were withdrawn from further consideration. The scope of the elected subject matter is currently limited to the elected species of compound 66.

4. Claims 20-22, 28-30 and 33-37 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected subject matter. Election was made **without** traverse in the reply filed on November 8, 2007.

#### ***Information Disclosure Statement***

5. The information disclosure statements submitted on March 29, 2006 was in compliance with the provisions of 37 CFR 1.97 and 37 CFR 1.98. The IDS was considered. A signed copy of form 1449 is enclosed herewith.

#### ***Claim Objections***

6. Claims 119, 23-27, 31 and 32 objected to for containing non-elected subject matter.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 19 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described

in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claim excludes the following compound via a proviso:

“5-bromo-2-cyano-3,6- diisopropylbenzene sulfonamide.”. The exclusion of this compound from the claimed Markush group does not appear to find support in the originally filed disclosure of PCT/EP04/11004.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim is drawn to “compound of the general formula I”. It is unclear what the term “ general” entails: ie. it may be interpreted to allow for only compounds that fit the structural limitations defined by Formula I, or alternatively to allow for compounds that are structurally similar yet do not fall within the genus. It is suggested that the term “ general” be deleted from the claims to overcome this ground of rejection.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 19, 26, 27, 30 and 32 rejected under 35 U.S.C. 103(a) as being obvious over van Hes et al.

Determination of the scope and contents of prior art.

The reference teaches the following compound as an aphicidal agent  
(21) 2-cyano-3-methyl-N,N-dimethylbenzenesulphonamide, (see column 3).

Ascertaining the differences between prior art and instant claims.

The following modification to the prior art compound results in a species that is encompassed by the instant Markush claims: replace methyl by hydrogen as substituent for the sulfonamide nitrogen. Thus, this homolog of the prior art compound is encompassed by the instant Markush claims.

Resolving the level of ordinary skill in the pertinent art – Prima Facie Case of Obviousness.

To those skilled in chemical art, one homologue is not an advance over an adjacent member of a homologous series. The reason for this is that one of ordinary skill, knowing the properties of one member of series, would know what properties to expect in adjacent members. In re Henze, 85 USPQ 261 (1950). In re Wood, 199 U.S.P.Q. 137 (C.C.P.A. 1978) and In re Lohr, 137 U.S.P.Q. 548, 549 (C.C.P.A. 1963).

One of ordinary skill would be motivated, from the disclosure of van Hes et al., to make the modification required to arrive at the instant invention with reasonable expectation of success for obtaining an aphicidal compound. The motivation to make this change would be to make additional compounds for the quoted purpose.

Thus, the instant claims are *prima facie* obvious over the teaching of the prior art.



### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

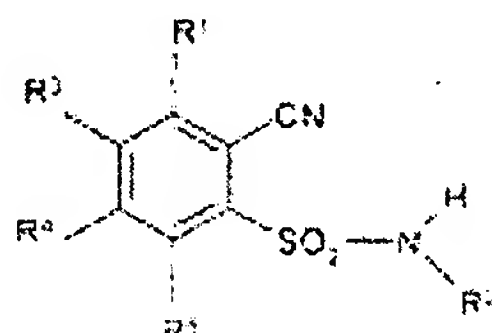
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 19, 23-27, 31 and 32 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 35 of copending Application No. 11/909,447. Although the conflicting claims are not identical, they are not patentably distinct from each other for the reasons below.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Determination of the scope and contents of claim 35 of US Appl. 11/909,447.

The claims are drawn to a seed comprising a Markush group of compounds with the same utility as that instantly claimed.



The instant election (ie. compound 66, Section 2) is a disclosed preferred embodiment of 11/909,447 (specification pg. 60).

Ascertaining the differences between claim 35 of US Appl. 11/909,447 and the claims at issue.

The preferred embodiment (ie. seed comprising the instantly elected compound) anticipates the instant claims.

Resolving the level of ordinary skill in the pertinent art – Prima Facie Case of Obviousness.

MPEP § 2144.08.II.A.4(c) states "...consider teachings of a preferred species within the genus. If such a species is structurally similar to that claimed, its disclosure may motivate one of ordinary skill in the art to choose the claimed species or subgenus from the genus, based on the reasonable expectation that structurally similar species usually have similar properties". This is a "Genus-Species Guidelines" for the examination



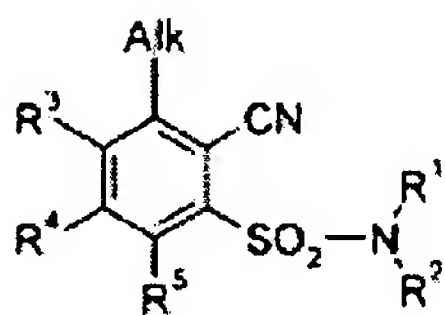
based on 35 U.S.C. 103. An analogous guideline was followed here for the analysis of obviousness-type double patenting.

The preferred embodiment suggests to one of ordinary skill to practice the invention that anticipates the instant election. Thus, the instant claims are *prima facie* obvious over claim 35 of US Appl. 11/909,447.

12. Claims 19, 23-27, 31 and 32 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22-26, 30 and 40 of copending Application No. 11/791,398. Although the conflicting claims are not identical, they are not patentably distinct from each other for the reasons below.

Determination of the scope and contents of claims 22-26, 30 and 40 of US Appl. 11/909,447

The claims are drawn to a Markush group of compounds with the same utility as that instantly claimed.



Preferred embodiments disclosed include, for example, the species wherein

Examp- ple	R <sup>1</sup>	R <sup>2</sup>	Alk	R <sup>3</sup>	R <sup>5</sup>	m.p. [°C]*/ ¹H-NMR**/ LC/MS***
No 9	C <sub>2</sub> H <sub>5</sub>	C <sub>2</sub> H <sub>5</sub>	OCHF <sub>2</sub>	H	H	Oil

(specification pg. 33).

Ascertaining the differences between claims 22-26, 30 and 40 of US Appl. 11/909,447 and the claims at issue.

The preferred embodiment is a homolog of the instantly elected compound: ie. sulphonamide nitrogen is substituted with ethyl (species in copending application) vs. hydrogen (species of the instant election).

Resolving the level of ordinary skill in the pertinent art – Prima Facie Case of Obviousness.

MPEP § 2144.08.II.A.4(c) states "...consider teachings of a preferred species within the genus. If such a species is structurally similar to that claimed, its disclosure may

motivate one of ordinary skill in the art to choose the claimed species or subgenus from the genus, based on the reasonable expectation that structurally similar species usually have similar properties". This is a "Genus-Species Guidelines" for the examination based on 35 U.S.C. 103. An analogous guideline was followed here for the analysis of obviousness-type double patenting.

The preferred embodiment suggests to one of ordinary skill to make the instantly elected compound. Thus, the instant claims are *prima facie* obvious over claims 22-26, 30 and 40 of US Appl. 11/909,447.

*Conclusion*

13. No claims allowed.

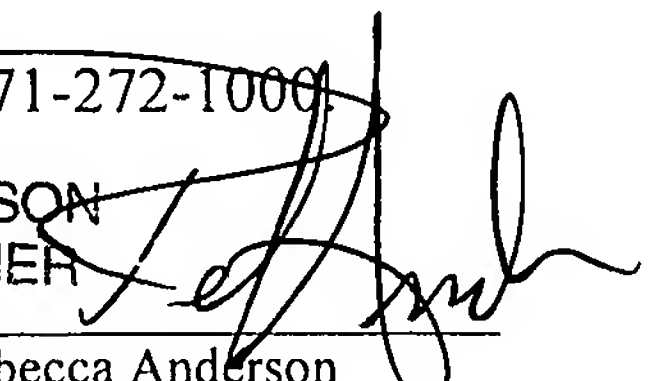
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sun Jae Y. Loewe whose telephone number is (571) 272-9074. The examiner can normally be reached on M-F 7:30-5:00 Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SL  
1-18-2008

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